



YJD60P04A

P-Channel Enhancement Mode Field Effect Transistor

Product Summary

V_{DS}	-40 V
I_D	-60 A
$R_{DS(ON)}$ (at $V_{GS}=-10V$)	8 m
$R_{DS(ON)}$ (at $V_{GS}=-4.5V$)	11 m
100% EAS Tested	
100% V_{DS} Tested	

General Description

Trench Power LV MOSFET technology
 Low $R_{DS(on)}$ & FOM
 Excellent stability and uniformity
 Moisture Sensitivity Level 1
 2 ef : RRa B9 & C-0 Flammability Rating
 5alogen Free

Applications

= dR ZN NTRZR a
 = aNORR bVZR a

Absolute Maximum Ratings ($T_A=25$ unless otherwise noted)

Parameter		Symbol	Limit	Unit
Drain-source Voltage		V_{DS}	-40	V
Gate-source Voltage		V_{GS}	± 25	V
Drain Current	$T_A=25^\circ C$	I_D	-13	A
	$T_A=100^\circ C$		-8	
	$T_C=25^\circ C$		-60	
	$T_C=100^\circ C$	-38		



Electrical Characteristics ($T_J=25$ unless otherwise noted)

Parameter	
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Typical Electrical and Thermal Characteristics Diagrams

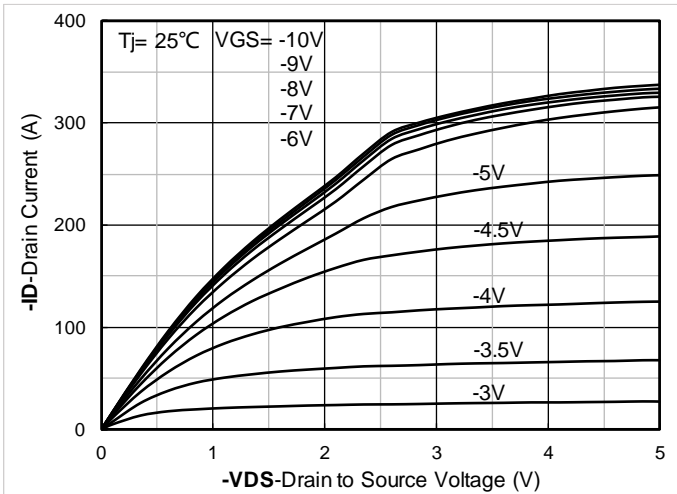


Figure 1. Output Characteristics

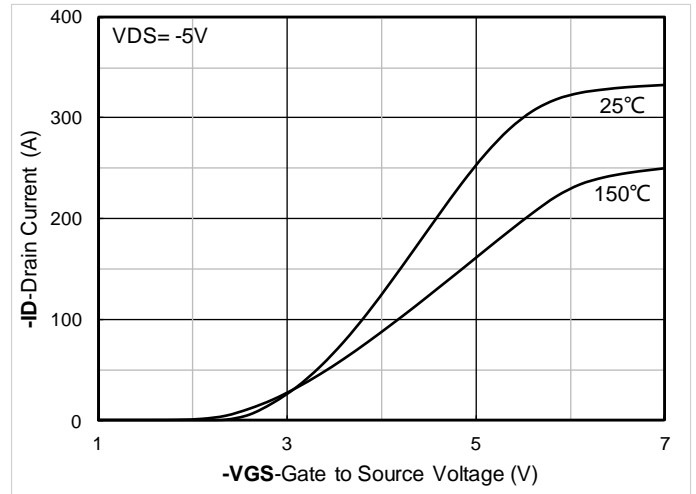


Figure 2. Transfer Characteristics

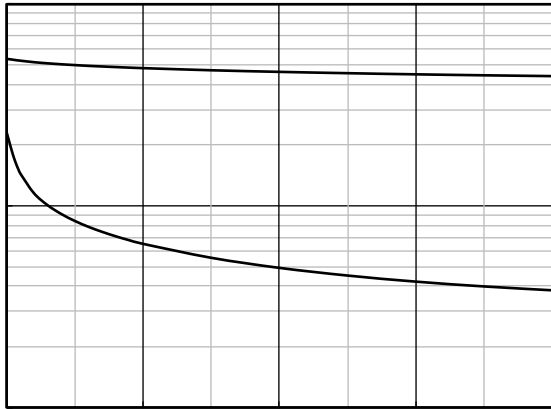


Figure 3. Capacitance Characteristics

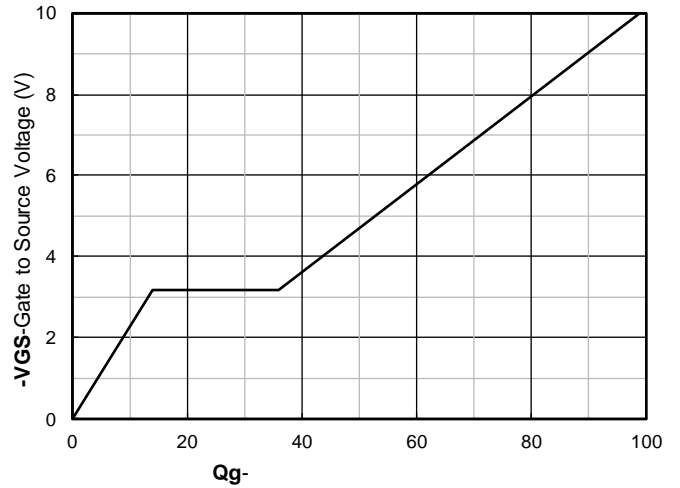


Figure 4. Gate Charge

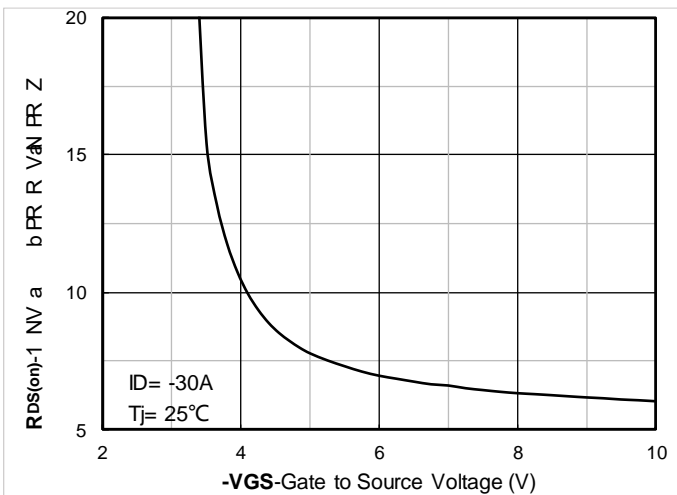


Figure 5. On-Resistance vs Gate to Source Voltage

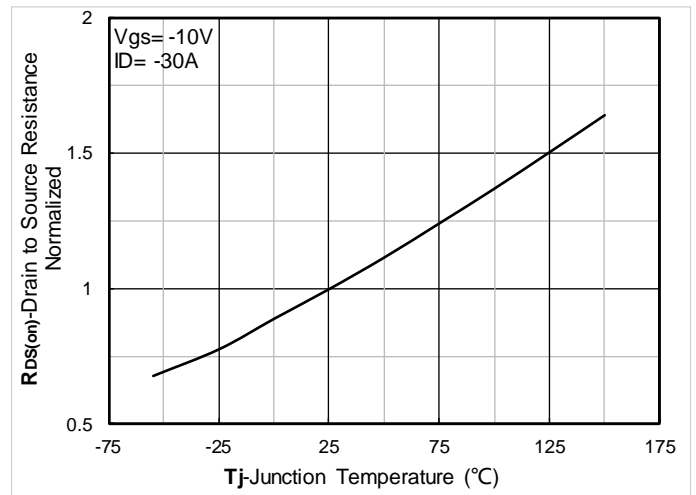


Figure 6. Normalized On-Resistance



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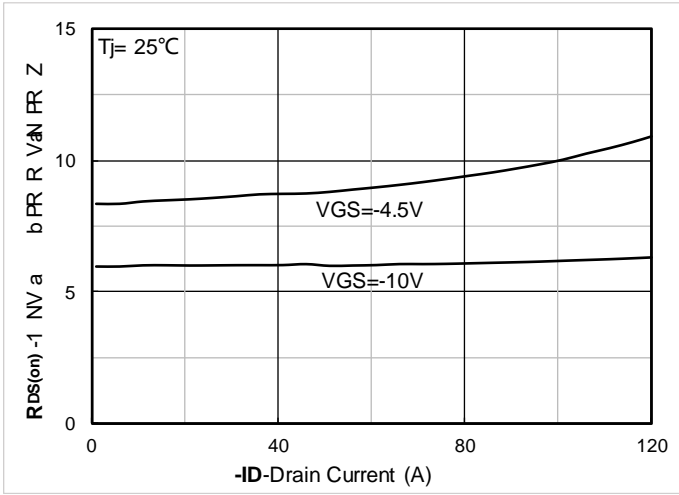


Figure 7. RDS(on) VS Drain Current

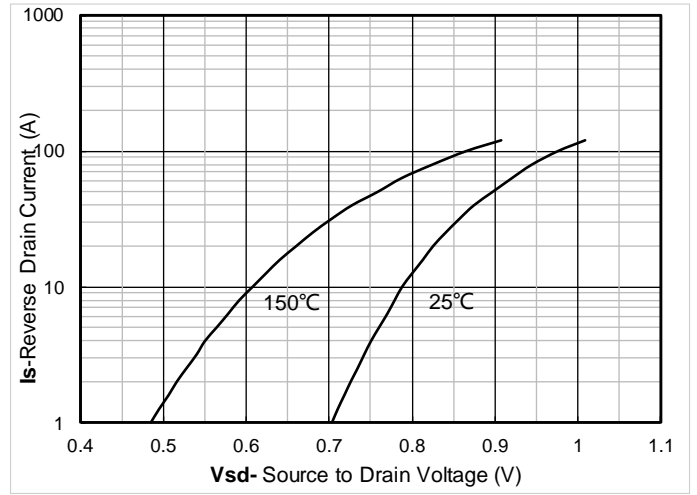


Figure 8. Forward characteristics of reverse diode

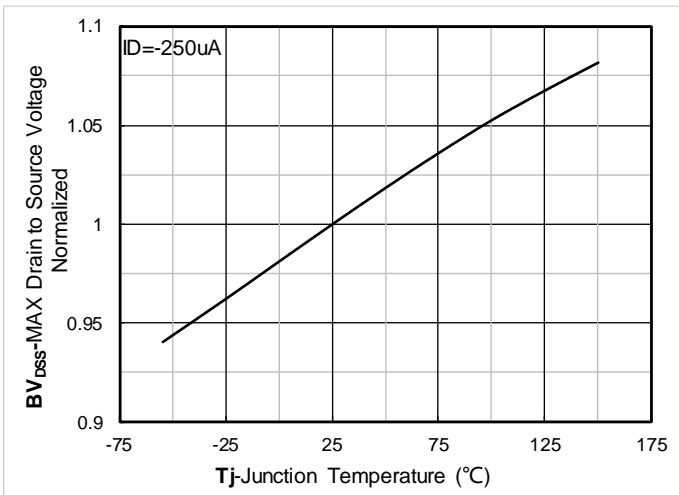


Figure 9. Normalized breakdown voltage

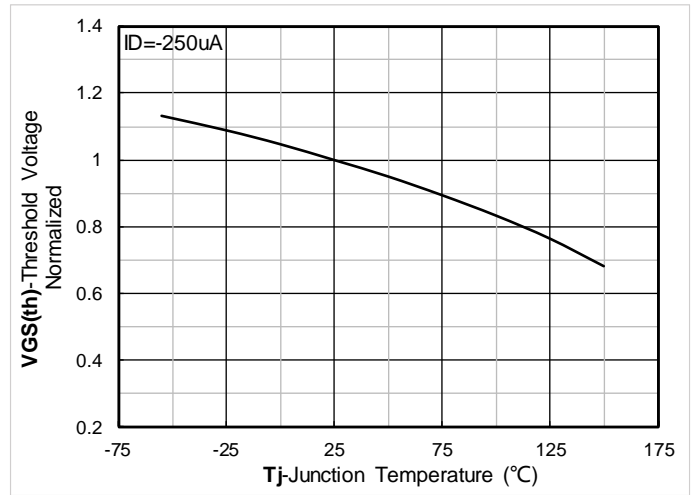


Figure 10. Normalized Threshold voltage

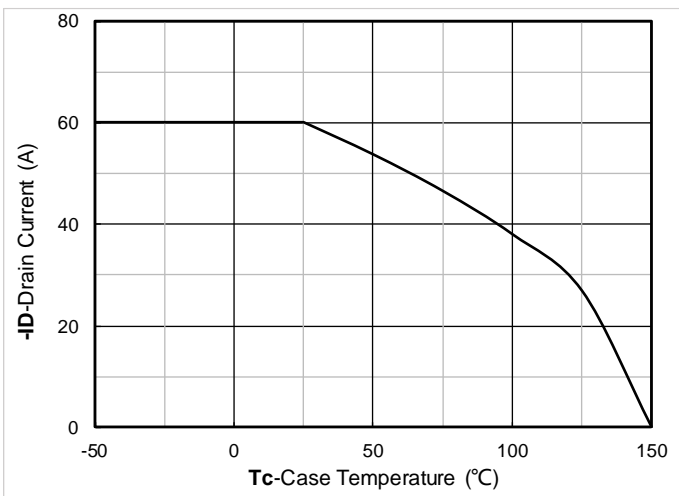


Figure 11. Current dissipation

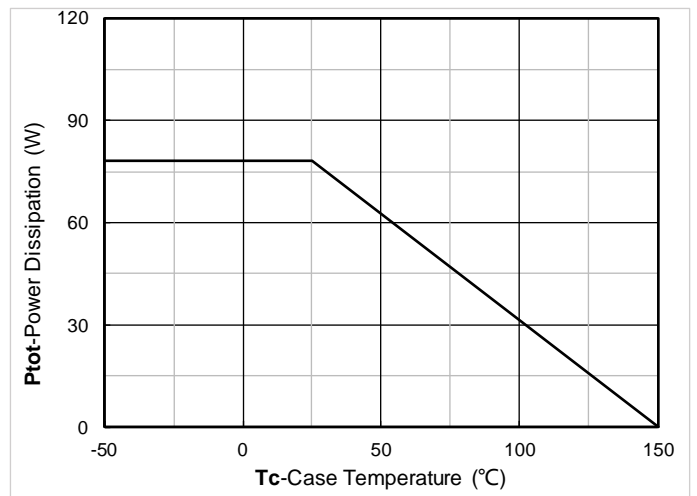


Figure 12. Power dissipation



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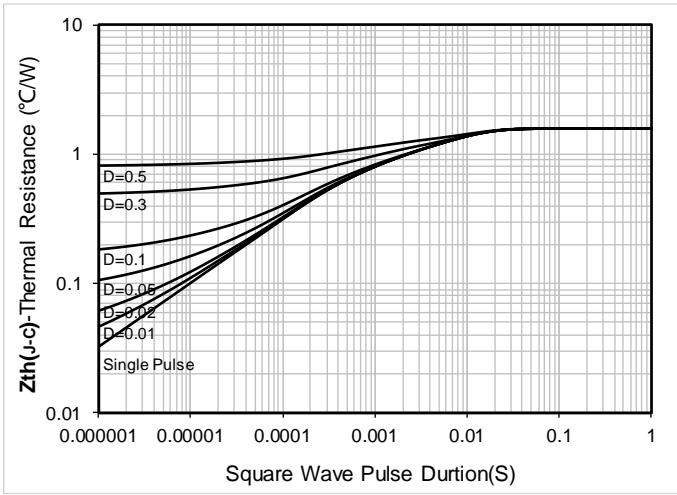


Figure 13. Maximum Transient Thermal Impedance

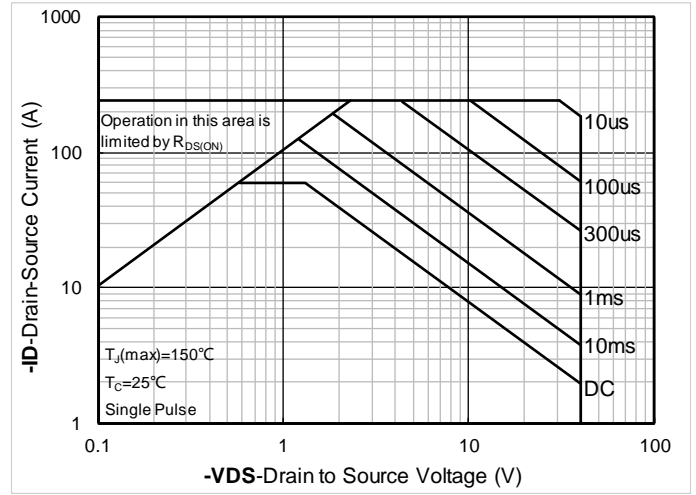
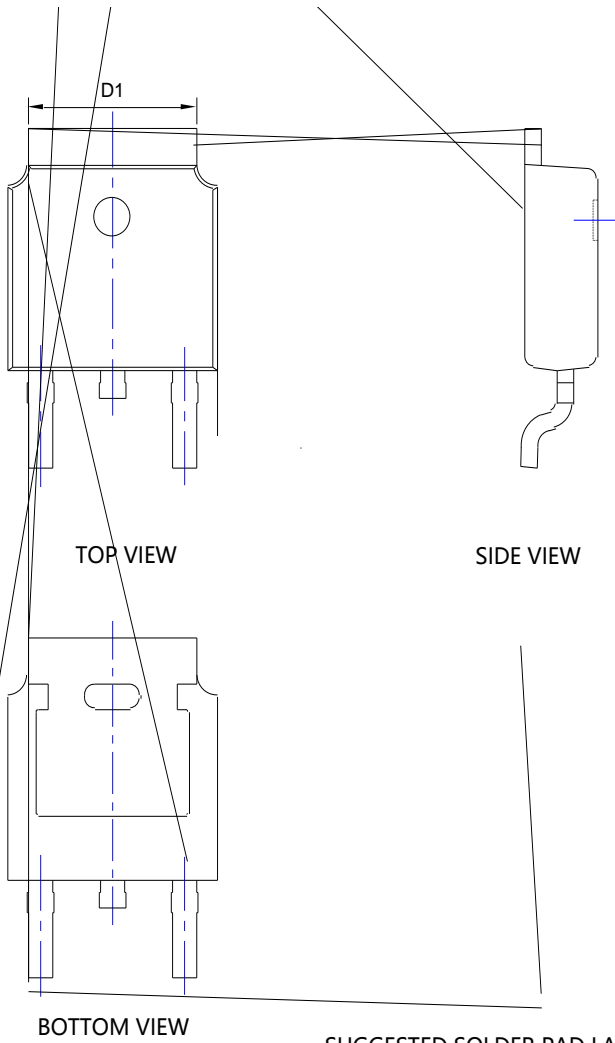


Figure 14. Safe Operation Area



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TO-252-B Package information



SYMBOL	DIMENSIONS					
	MIN.	NOM.				
A1	0.000					
A2	0.087	0.091				
A3	0.035	0.039				
b	0.026	0.030				
c	0.018	0.020				
D	0.256	0.260				
D1	0.256	0.260				
D2	0.181	0.189				
E	0.390	0.398				
E1	0.236	0.240				

NOTE:
 1.PACKAGE BODY SIZES EXCLUDE MOLD FLASH AND GATE BURRS.
 2.TOLERANCE 0.1mm UNLESS OTHERWISE SPECIFIED.
 3.THE PAD LAYOUT IS FOR REFERENCE PURPOSES ONLY.

BT 25.596 m9.57 m63.096 m3.57 IS163.03 164.78 m153.73 163.78 m1346.73 164.79 IS63.03 163.78 IS154 213.65 154.95 153.72.45 210.6 m71346.73 164.73 c



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